

CLAIMS

1. A method for filling a coin magazine having a plurality of channels for receiving coins of a plurality of denominations, the method comprising:

placing a coin magazine on a support;

moving the coin magazine from a first position to a second position for receiving coins in the coin magazine, the coin magazine having one channel positioned at a coin filling location when the coin magazine is in the second position;

placing a first batch of coins of a first denomination on a coin feeder positioned above the coin magazine in the second position;

feeding coins towards a coin exit, said coin exit communicating with the one channel of the coin magazine positioned at the coin filling location;

controlling a direction of a flow of coins as the coins leave the exit so that the coins are directed into the first channel positioned at the coin filling location; and

moving a second channel of the magazine into the coin filling location.

2. The method of claim 1, further comprising placing a second batch of coins of a second denomination on the coin feeder, which is positioned above the coin magazine, and feeding the coins of the second denomination into the second channel.

3. The method of claim 1, wherein the feeding of coins is stopped before moving the second channel into the coin filling location and wherein the feeding of coins from the first batch is restarted to feed coins of the first denomination into the second channel.

4. The method of claim 1, wherein when it is desired to remove the coin magazine that has been filled with coins, moving the coin magazine from the second position to the first position.

5. The method of claim 1, wherein prior to moving the coin magazine from the first position to the second position, the coin feeder is pivoted upward to allow clearance of the coin magazine as it is moved to the second position.

6. The method of claim 1, wherein prior to moving the coin magazine from the first position to the second position, the coin feeder is placed on a movable support which is then moved to move the coin magazine to the second position.

7. The method of claim 6, wherein the support is pivoted into and out of the second position below the coin filling location.

8. The method of claim 7, wherein the coin magazine is cylindrical and wherein the coin magazine is rotated on the support to move the second channel of the magazine into the coin filling location.

9. The method of claim 1, wherein the feeding is powered by hand operation.

10. The method of claim 1, wherein the feeding is powered by an electric motor.

11. The method of claim 1, wherein placing the first batch of coins of one denomination on a coin feeder includes lifting up a pivotable coin input tray where coins of one denomination have been initially placed to move the coins onto a feeding surface.

12. The method of claim 1, wherein a direction of feeding of the coins is reversed to feed coins back into a coin input tray.

13. The method of claim 1, wherein the coin magazine has coin channels arranged in a straight line and wherein moving the second channel of the magazine into the coin filling location is a linear movement of the magazine along a straight line path.

14. The method of claim 1, wherein the coins are arranged in a single file and the single file is advanced to the coin exit.

15. The method of claim 1, wherein individual coins are separated from the first batch and then individually conveyed to the coin exit.

16. The method of claim 1, wherein the coin feeder is oriented at an acute angle of approximately fifteen degrees from horizontal along an axis from a back of the coin feeder to the coin exit which is at a front of the coin feeder.

17. The method of claim 16, further comprising moving a guard away from a closed position while moving the coin magazine from the first position to the second position for receiving coins in the coin magazine, the guard assisting in directing coins into a coin channel having an open side.

18. The method of claim 16, wherein the coin magazine is placed on the support, which is stationary and which is oriented at an acute angle of approximately eighteen degrees from horizontal along an axis from a back of the support to a front of the support.

19. The method of claim 1, wherein a chute extension is extended and wherein excess coins of the first denomination are fed in a forward direction over the coin filling location to a receptacle.

20. An apparatus for filling a coin magazine having channels for receiving coins of a plurality of denominations, the apparatus comprising:

a support for supporting a coin magazine as the coin magazine is moved from a first position for inserting the coin magazine into the apparatus to a second position for filling coins into the coin magazine, the coin magazine having a first channel positioned at a coin filling location when the coin magazine is in the second position;

a feeder positioned above the coin filling location for receiving a batch of coins of one denomination and for feeding coins towards a coin exit;

a guard positioned at the coin filling location for preventing coins from overshooting the coin filling location; and

wherein the coin magazine is movable on the support between the second position for receiving coins in the first channel to a third position for receiving coins in a second channel.

21. The apparatus of claim 20, wherein the coin magazine has at least a first channel and a second channel for receiving coins of a same denomination and a same size.

22. The apparatus of claim 20, wherein the coin magazine has at least a first channel and a second channel for receiving coins of different respective denominations and different respective sizes.

23. The apparatus of claim 20, wherein the coin magazine is cylindrical.

24. The apparatus of claim 20, wherein the coin magazine has coin channels arranged in a straight line.

25. The apparatus of claim 20, wherein the feeder is a disc feeder that is moved by manual power.

26. The apparatus of claim 20, wherein the feeder is a disc feeder that is powered by an electric motor.

27. The apparatus of claim 20, wherein feeder is a disc feeder that arranges the coins in a single file and then advances the single file to the coin exit.

28. The apparatus of claim 20, wherein the feeder is a disc feeder with a scalloped feeding member with pockets for individual coins that separates individual coins from a batch and conveys the coins to the coin exit.

29. The apparatus of claim 20, further comprising a pivotable coin input tray for holding coins and for lifting to move coins onto the feeder through an entry between the coin input tray and the feeder.

30. The apparatus of claim 20, wherein the feeder is a disc feeder that is rotatable in a first rotational direction to feed coins to the exit and that is rotatable in a second rotational direction to return coins through the entry from the coin input tray.

31. The apparatus of claim 20, wherein the coin channels each have an open side and wherein the guard is positioned on a pivotable flap that is closed to close the open side and to project above the coin channel to direct coins into the first coin channel.

32. The apparatus of claim 20, wherein the guard is mounted opposite the exit to deflect coins downward and to reverse direction of the coins into the first coin channel.

33. The apparatus of claim 20, wherein the coin feeder is mounted for pivoting upward to allow clearance of the coin magazine as it is moved to the second position.

34. The apparatus of claim 20, wherein the support is movable, and wherein the coin magazine is placed on the

support, which is then moved to move the coin magazine to the second position.

35. The apparatus of claim 34, wherein the support is pivoted into and out of the second position below the coin filling location.

36. The apparatus of claim 35, wherein the coin magazine is cylindrical and wherein the coin magazine is rotated on the support to move the second channel of the magazine into the coin filling location.

37. The apparatus of claim 20, wherein the coin feeder is oriented at an acute angle of approximately fifteen degrees from horizontal along an axis from a back of the coin feeder to the coin exit which is at a front of the coin feeder.

38. The apparatus of claim 20, wherein the guard is part of an assembly that is pivotable between a closed position and a non-hindering position to allow clearance for the coin magazine to move from the first position to the second position.; and

wherein the hub assembly has a portion that is urged against the guard assembly to move it to the non-hindering position that allows the magazine to be moved to the second position for filling.

39. The apparatus of claim 20, wherein the guard is part of an assembly that includes a spring-biased guard flap that slides along an outside of the coin magazine to move from closing a first channel to closing a second channel as the coin magazine is rotated on the support.

40. The apparatus of claim 20, wherein the support is oriented at an acute angle of approximately eighteen degrees from horizontal along an axis from a back of the support to a front of the support.

41. The apparatus of claim 20, further comprising a chute including a reference edge for guiding coins from the coin exit of the feeder to the coin filling location.

42. The apparatus of claim 41, wherein the chute is assembled with a chute extension that can be extended to feed excess coins over the coin filling location to a receptacle.

43. The apparatus of claim 20, wherein the guard has a curved profile with one portion for closing the first channel which has a diameter of different size than a diameter of the second channel and another portion for closing the second channel.